

The transaction records 68, stored in memory for a period of time, are useful for providing a printout of daily transactions 64, or a modem communication of such a listing to the central plant 50, as well as for providing information necessary for the customer receipt and for tying to order in other appropriate ways for easy tracking of the order.

At the central processing plant 50, information from the transaction record, whether communicated over modem/telephone line or by being carried by the route driver as a list or by being inserted in each drop-off garment bag by the customer, is used to verify the order input by the customer and to provide basis for a billing in the form of a debiting of the customer's credit card account, if the listing of requested services is correct.

FIGS. 6A and 6B are a routine chart illustrating some aspects of the method and system of the invention. FIGS. 6A and 6B show interface with the customer at drop-off and pickup, including customer advice display sequences, customer input, and other aspects of customer drop-off and pickup sequences. They also show collection of orders by a route driver, processing of orders at the central plant, and return of processed orders to the remote outlet by the route driver.

FIG. 7 shows in a diagrammatic sequence chart the basic elements of flow in a modified system according to the invention wherein stored items are rented to customers. In such a system, the pickup occurs first followed by the drop-off after the rental item has been used by the customer. As illustrated, after the user's credit card is inserted, the system may first check the validity of the card and availability of credit for these services, through a computer, auto dialup and banking network. If the card is valid, the system will then display to the customer a menu of rental items available. A keyboard, touchscreen or other customer input devices enables the customer to make his selection.

If the item is in stock, the customer's credit card account is then electronically debited for the services based on one rental period (e.g., one day). The selected item is vended to the customer, along with a receipt showing the transaction and the charge to the customer's account.

When the customer returns the item he again inserts his card, whereupon the machine receives the item, as by opening a door. The system may include a check of the period of time elapsed, and if more than one rental period is involved, a further automatic debiting of the customer's account will occur. Also, the system may include an automatic verification that the correct item is being returned, as by a readable identification code placed indelibly on each item. If the correct item has been returned, the display can signify that the transaction is complete, and a return receipt can be issued to the customer.

FIG. 8 is included to illustrate an alternative item locating means for all of the above described embodiments of the invention, wherein the positions of items in the storage facility are identified for retrieval not by being tagged to a storage position, but rather by a readable identification code (such as a bar code) attached to each item. As FIG. 8 illustrates a scanner which can be connected to the retrieval mechanism at some point will scan the items in the storage facility to identify locations. This can either be done in a search for a particular item, or it can be done when the machine is idle, e.g. just after the route driver has returned processed orders, with all items being scanned and their locations being

recorded in memory. In this way, when a customer seeks to retrieve his processed order, the equipment can go immediately to the re-identified location to retrieve the order.

The above-described preferred embodiments illustrate the principles of the invention, but are not intended to limit the scope of the invention. Other embodiments and variations to these preferred embodiments will be apparent to those skilled in the art and may be made without departing from the scope of the invention as defined in the following claims.

We claim:

1. A system for automated drop-off and pickup of laundry and dry cleaning orders, remote from a central dry cleaning/laundry plant, for unattended use by customers, comprising:

a storage facility for garment bags, soiled garments of unprocessed orders and processed laundry/dry cleaning orders, including means for storing garment bags and processed orders in positions for retrieval,

a customer interface panel at the front of the storage facility,

retrieval means in the storage facility for retrieving a garment bag or a processed order upon receipt of an appropriate command,

the customer interface panel including card reader means for reading encoded information on a customer's non-dedicated general purpose credit card, display means for presenting information and instructions to the customer, menu means for displaying to the customer a menu of services for selection for the customer's order, customer input means for enabling the customer to select desired services from the menu of services in accordance with the items the customer is dropping off, and printer means for printing and outputting to the customer a receipt reflecting the services selected by the customer on the customer input means,

a door adjacent to the interface panel between the customer's position and the storage facility, including door opening and closing means,

computer means including memory means, for issuing appropriate instructions to the customer on the display means after receiving information from the customer's credit card; for receiving the customer's input on the input means; for issuing a command to the retrieval means if the customer's order has been processed and placed in the storage means, to go to a particular storage position in the storage facility to retrieve the processed order and bring it to the door and open the door to enable the customer to remove the processed order; for creating and storing a transaction record of each transaction; and for driving the printer means and other functions.

2. The system of claim 1, wherein the computer means include means for generating and recording in memory a transaction record with a customer's drop-off order identified by the customer's credit card information and retaining the record of the customer's drop-off order in memory until the customer retrieves the processed order, and card-responsive means for searching memory for a dropped off order of a customer whenever that customer's credit card is inserted and read by the card reader means, and for (1) if the drop-off order has not been processed and returned to the storage facility, causing the display means to display a message that the order has not yet been completed, (2) if the